REMARKS

The Office Action of July 9, 2008 has been received and its contents carefully considered.

Claims 1 and 4 are the independent claims. Claims 1-18 are now pending in the application. Claims 1-3 have been allowed.

The Office Action rejects claims 4 and 11 under 35 U.S.C. 103(a) as being unpatentable over Zweig et al (US 7,154,854) in view of Tanigichi et al (US 6,445,679) and Gable et al (US 4,550,402), hereafter referred to as Zweig, Tanigichi, and Gable. It is respectfully submitted that independent claim 4, as well as claim 11 dependent therefrom, is patentable over the cited references for at least the following reasons.

Claim 4 recites:

"A method for transmission rate adaptation used in a wireless network, a current transmission rate being selected from a set of predetermined transmission rates, each of the predetermined transmission rates, R, being associated with a PER (packet error rate) range, which includes a predetermined threshold pair of a high PER (packet error rate) threshold, denoted as $Q_H(R)$, and a low PER threshold, denoted as $Q_L(R)$, the method comprising:

(1) transmitting a first plurality of packets, wherein a first number N1 of the first plurality of packets is determined according to the $Q_H(r_n)$;

(2) calculating a first estimated PER, denoted as $P1(r_n)$, over the first plurality of transmitted packets, wherein r_n denotes the current transmission rate, and the subscript n denotes the adaptation iteration index;

(3) checking whether the $P1(r_n)$ being larger than the $Q_H(r_n)$, if yes, processing step (4), else processing step (5);

(4) reducing the transmission rate and ending the method;

(5) transmitting a second plurality of packets, wherein **the number of the second plurality of packets is equal to a second number N2 minus the**

first number N1, and **the second number N2 is determined according to the $Q_L(r_n)$;**

(6) calculating a second estimated PER, denoted as $P2(r_n)$ over the second plurality of transmitted packets;

(7) checking whether the $P2(r_n)$ being smaller than the $Q_L(r_n)$, if yes, processing step (8), else processing step (9);

(8) increasing the transmission rate and ending the method;

(9) checking whether the $P2(r_n)$ is larger than the $Q_H(r_n)$, and if yes, processing step (10), else ending the method; and

(10) reducing the transmission rate. (*Emphasis added*)

In contrast, Zweig discloses the AP that first transmits one or more data packets to one or more associated WU(s) and determines a factor indicative of the error(s) that occurred in the transmission of the one or more data packets to the WU(s) (see col. 8, lines 24-29 and FIG. 4). The fragmentation threshold is reduced if the (transmission error) factor is above the upper threshold and is increased if the factor is below the lower threshold (see col. 8, lines 41-61 and FIG. 4). FIG. 5 illustrates a table useful for explaining the relationship between the fragmentation threshold and the data rate. The left-most column lists divisional factors for four exemplary scenarios, with the maximum fragmentation threshold being 1500 for all the scenarios (see col. 10, lines 23-27).

Zweig fails to disclose or suggest that ***the number of the second plurality of packets*** is equal to ***a second number N2*** minus the first number N1 and ***the second number N2*** **is determined according to the $Q_L(r_n)$**, as recited in claim 4.

The Office Action alleges on page 4 that Zweig has disclosed that the second number N2 is determined according to the $Q_L(r_n)$, as recited in claim 4. However, Zweig at most suggests that the number of a plurality of packets (to be sent according to the fragmentation

threshold) is related to the upper threshold or the lower threshold. That is, Zweig at most suggests that the number of a first plurality of packets is related to the upper threshold (corresponding to the $Q_H(r_n)$ of claim 4) and the number of a second plurality of packets is related to the lower threshold (corresponding to the $Q_L(r_n)$ of claim 4). Zweig fails to suggest that the number of the second plurality of packets is equal to **a second number determined according to the upper threshold** minus a first number determined according to the lower threshold.

Tanigichi discloses that a stream conversion section 23 compares a new transmission rate requested by a QoS setting message with a transmission rate set currently (step J1). If the new transmission rate is smaller, the stream conversion section 23 calculates the number of bytes as the upper bound limit for data which can be transmitted in one cycle (one GOP cycle) (the number of transmission permissible bytes) from a newly requested transmission rate (step J8). When a new transmission rate is higher than the current transmission (step J1), the stream conversion section 23 not only calculates the number of transmission permissible bytes from the new transmission rate but sets a fixed flag to the OFF state (see col. 29, lines 63-65, col. 30, lines 23-27 and 45-51).

Gable discloses that a second group of mini-packets contains only the source header (address) in the address portion and contains message information in the message data portion. The number of mini-packets in the second group corresponds to the number necessary to complete the transmission of the message and corresponds to the word count number transmitted with the first group of mini-packets (see col. 4, lines 34-41).

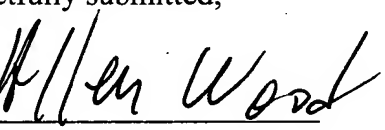
Gable fails to explicitly disclose or suggest that ***the second number N2* is determined according to the $Q_L(r_n)$** and the number of the second plurality of packets is equal to ***the***

second number N2 (determined according to the $Q_L(r_n)$) minus the first number N1, as recited in claim 4. Thus, the combination of the references Zweig, Tanigichi and Gable would not produce the invention defined by claim 4. Therefore, it is respectfully submitted that claim 4, as well as claim 11 dependent from claim 4, is patentable over the cited references and the rejection of claims 4 and 11 should be withdrawn.

Moreover, claims 5-10 and 12-18 depend, either directly or indirectly, from the independent claim 4, and are therefore allowable based on their respective dependence from the independent claim 4, which is believed to be allowable, or due to the additional novel features set forth therein. Therefore, the rejection of claims 5-10 and 12-18 should be withdrawn.

For the foregoing reasons, it is respectfully submitted that this application is in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,



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